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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,943	07/07/2003	Alfred R. Globus		6749

7590 10/06/2004
Evelyn M. Sommer
30th Floor
825 Third Avenue
New York, NY 10022

EXAMINER

PAK, JOHN D

ART UNIT PAPER NUMBER

1616

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/613,943	Applicant(s) GLOBUS, ALFRED R.	
	Examiner JOHN PAK	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Claims 1-14 are pending in this application.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11, drawn to composition comprising a mixture of a noble gas and chlorine gas, classified in class 424, subclass 661+.
- II. Claims 12-14, drawn to method for removing microorganisms in various spaces such as a room, building, county jail, etc., classified in class 422, subclass 28+.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply

where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Inventions of Group I and Group II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process, such as in cleaning molten aluminum (see U.S. Patent No. 4,427,185).

There would be undue burden placed on the Examiner if the restriction were not required. A search for the gas mixture involves searching in places where no pertinent art to the method invention would likely exist, because the gas mixture must be searched regardless of the intended use. In contrast, the method invention requires searching in the substrate disinfection field of endeavor wherein gases are used to disinfect, for example. In view of the extensive prior art collection related to gaseous mixtures for myriad end uses, to search and examine more than one invention here would place an undue burden on the Examiner.

Therefore, for the reasons of distinctness and undue burden, the restriction requirement as set forth above is deemed to be proper.

During a telephone conversation with Ms. Sommer on 10/1/2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-11. Affirmation of this election must be made by applicant in replying to this Office action. Claims 12-14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyer (US 4,427,185).

Meyer explicitly discloses an "argon-chlorine gas mixture in the ratio of about 95% to 5%" (column 4, lines 43-44).

Even though Meyer's argon-chlorine gas mixture is not stated to be for controlling anthrax bacterium, Norwalk virus, SARS virus, *Legionellae*, and mold/spores, the fact that the exact same gas mixture was disclosed by Meyer means that Meyer's gas mixture would necessarily have possessed the same properties as applicant's gas mixture. MPEP 2112, 2112.01. The claims are thereby anticipated.

Claims 1-7, 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Chemical abstracts 117:95861 (publicly available on STN online on 9/5/1992).

Chemical abstracts 117:95861 discloses an argon-chlorine gas mixture wherein chlorine is present at 2%. For the reasons stated above, this argon-chlorine gas mixture would necessarily possess the properties claimed by applicant because there is no difference between applicant's gas mixture and the prior art gas mixture. The claims are anticipated.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer (US 4,427,185).

Meyer explicitly discloses an "argon-chlorine gas mixture in the ratio of about 95% to 5%" (column 4, lines 43-44). A broader teaching of argon-chlorine cleaning gas mixture is also provided (column 3, lines 35-36).

Even though Meyer does not expressly provide a 20:1 (argon:chlorine) ratio, Meyer's "about " 19:1 ratio is suggestive of 20:1. Given that the gas is for cleaning purposes, increase of the chlorine ratio to the claimed range would have been within the scope of "about" in Meyer's teachings. The obtained gas from the slightly higher

chlorine content would necessarily possess the activities of the chlorine gas, which would function to provide the claim-recited microbicidal properties.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly disclosed or suggested by the teachings of the cited references.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is **(571)272-0620**. The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Gary Kunz, can be reached on **(571)272-0887**.

The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.



JOHN PAK
PRIMARY EXAMINER
GROUP 1600

Notice of References Cited

Application/Control No.

10/613,943

Applicant(s)/Patent Under
Reexamination
GLOBUS, ALFRED R.

Examiner

JOHN PAK

Art Unit

1616

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-4,427,185	01-1984	Meyer, Clifford J.	266/220
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Chemical abstract 117:95681 (retrieved from HCAPLUS on STN ONLINE), entered in STN on 9/5/1992.
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

AN 1992:495861 HCAPLUS
DN 117:95861
TI Active oxidation of silicon carbide-based ceramics in argon-2%
chlorine-oxygen gas mixtures at 1000.degree.C
AU Ip, Sik Y.; McNallan, Michael J.; Park, Dong S.
CS Dep. Civ. Eng. Mech. Met., Univ. Illinois, Chicago, IL, 60680, USA
-SO Journal of the American Ceramic Society (1992), 75(7), 1942-8
CODEN: JACTAW; ISSN: 0002-7820
DT Journal
LA English
AB The corrosion in Ar-2% Cl2 gas mixts. of 4 low-cost SiC-based materials
suitable for use in high-temp. heat exchangers was investigated. The O
potential was controlled by addns. of O2 or H2 at 1000.degree.. Little
attack was obsd. in the reducing environment composed of Ar-2% Cl2-1% H2
or the oxidizing environment composed of Ar-2% Cl2-20% O2, but all of the
materials were subject to active corrosion at intermediate O potentials.
Selective attack of the free Si phase was obsd. for the siliconized SiC
materials. The severity of the active oxidn. and the O potential at which
the corrosion changed from active to passive were affected by the nature
of the sintering aids used in the materials.
ED Entered STN: 05 Sep 1992

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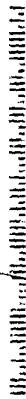
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